

AMENDMENTS TO THE CLAIMS

1. – 18. Cancelled.

19. (New) A method for bridging a first network and a second network, comprising:
receiving a network packet from a first network interface card (NIC);
invoking a protocol application programming interface (API) operation to deliver the network packet to an application program;
translating the protocol API operation into a miniport API operation associated with a second NIC to deliver the network packet to the second NIC without first delivering the network packet to the application program.

20. (New) The method of claim 19, wherein the translating includes using functions provided in a network driver interface specification (NDIS).

21. (New) The method of claim 20, wherein the NDIS is to provide drivers associated with the first and second NICs and a driver associated with the protocol API with a standardized interface with which to communicate.

22. (New) The method of claim 21, wherein the translating is performed by a subnet independent (SI) bridge software program (SI bridge).

23. (New) The method of claim 22, further comprising:
generating and modifying entries of an unmatched source address and
associated network information of the received network packet in a distribution table.
24. (New) The method according to claim 23, further comprising:
filtering the received network packet by comparing a source address of the
received network packet to the unmatched source address; and
delivering the filtered received network packet according to its destination
address, packet types and information in the distribution table.
25. (New) The method of claim 19 wherein the first NIC is a HomeRF NIC and the
second NIC is a HomePNA NIC.
26. (New) A machine readable medium having stored thereon a set of instructions,
which if executed by a machine cause the machine to perform a method comprising:
receiving a network packet from a first network interface card (NIC);
invoking a protocol application programming interface (API) operation to deliver
the network packet to an application program;
translating the protocol API operation into a miniport API operation associated
with a second NIC to deliver the network packet to the second NIC without first
delivering the network packet to the application program.

27. (New) The machine readable medium according to claim 26, wherein the translating is performed by a network protocol independent intermediate driver (bridge driver) that uses a standardized driver interface.

28. (New) The machine readable medium of claim 27 further comprising:
 exposing a first application programming interface to the standardized driver interface and a protocol driver;
 exposing a second application programming interface to the standardized driver interface and the first and the second network interface card drivers; and
 translating instructions from the protocol driver, the standardized driver interface and a first and second driver corresponding to the first and second NICs, respectively, to effectuate transparency of the bridge device driver.

29. (New) The machine readable medium of claim 28 further comprising:
 generating and modifying entries of an unmatched source address and associated network information of the received network packet in a distribution table.

30. (New) The machine readable medium of claim 29 further comprising:
 filtering the received network packet by comparing source address of the received network packet to the generated entry of unmatched source addresses; and
 delivering the filtered received network packet according to its destination address, packet type and information in the distribution table.

31 (New) The machine readable medium of claim 30, wherein the standardized driver interface adheres to a Network Driver Interface Specification.

32. (New) A computer system, comprising:

a first network interface card to couple to a first network and a second network interface card to couple to a second network;

a system controller, coupled to a processor and coupled to an Input/Output controller hub further coupled to the first and the second network interface cards;

a memory having stored therein a set of instructions, which if executed by the processor, causes the computer system to perform a method comprising:

receiving a network packet from a first network interface card (NIC);

invoking a protocol application programming interface (API) operation to deliver the network packet to an application program;

translating the protocol API operation into a miniport API operation associated with a second NIC to deliver the network packet to the second NIC without first delivering the network packet to the application program.

33. (New) The computer system of claim 32 further including a bridge device driver to use a standard driver interface to translate the protocol API operation into the miniport API operation.

34. (New) The computer system of claim 33, wherein the bridge device driver further comprises an API translator to expose a first application programming interface to the

standardized driver interface and a protocol driver, and to expose a second application programming interface to the standardized driver interface and a first and the second driver corresponding to the first and second NICs, and to translate instructions from the protocol driver, the standardized driver interface and the first and the second NIC driver to effectuate transparency of the bridge device driver.

35. (New) The computer system of claim 34, wherein the bridge device driver further comprises a packet analyzer to generate and modify entries of unmatched source addresses and associated network information of the received network packets in a distribution table.

36. (New) The computer system of claim 35, wherein the bridge device driver further comprises a packet delivery engine to filter the received network packet by comparing a source address of the received network packet to the generated entries of unmatched source address and to deliver the filtered received network packet according to their destination address, packet type and information in the distribution table.

37. (New) The computer system of claim 36, wherein the standardized driver interface adheres to a network driver interface specification.